

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



10/518879



(43) International Publication Date
8 January 2004 (08.01.2004)

PCT

(10) International Publication Number
WO 2004/003703 A3

(51) International Patent Classification⁷: G06F 9/00, 1/26,
G01C 21/26, H04B 7/185

(21) International Application Number:
PCT/US2003/020596

(22) International Filing Date: 26 June 2003 (26.06.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/392,678 27 June 2002 (27.06.2002) US
60/422,572 30 October 2002 (30.10.2002) US

(71) Applicant and

(72) Inventor: CHANG, Ting-Mao [US/US]; 2126 Villanova
Road, San Jose, CA 95130 (US).

CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE,
SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

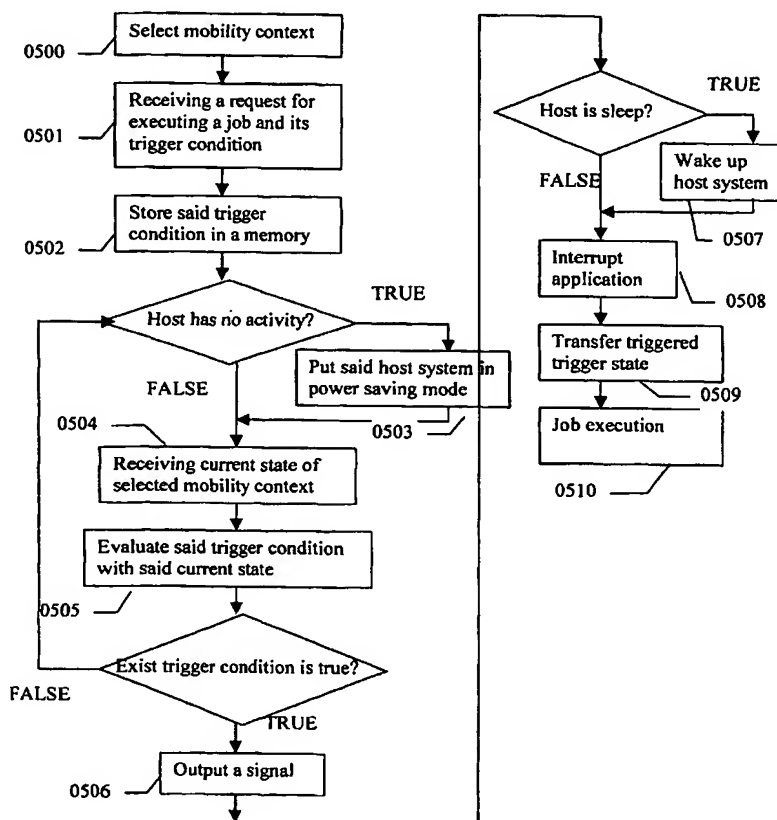
— with international search report

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,

(88) Date of publication of the international search report:
10 June 2004

[Continued on next page]

(54) Title: A POWER SAVING MOBILITY AWARE SYSTEM AND METHOD



(57) Abstract: A system and method reduces the power consumption by putting the system in sleep (0530) and use mobility context receiving device continue to monitor the context (0505) and wake up the system (0507) when discover the trigger state. After the system waked up, the application executes the job (0510) that is triggered by the trigger state (0509). The job might include reminder, TODO-List warning, e-mail retrieval, Computer system or network login, control other appliances, etc. The mobility context receiving device may also automatically interrupt the application while the system is powered on. The mobility context receiving device includes wireless communication interface or positioning device. The application might be a person sensitive reminder, a TO-DO list warning system, automatic login and e-mail retriever, and automatic appliance controller, proximity sensitive file manager, etc.

WO 2004/003703 A3



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/20596

A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : G06F 9/00, 1/26; G01C 21/26; H04B 7/185 US CL : 718/100; 713/320; 701/213; 342/357.06 According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S. : 713/320; 701/213; 342/357.06 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,978,923 A (KOU) 02 November 1999 (02.11.1999), the whole document.	1-23
Y	US 6, 237, 101 B1 (MOORE et al) 22 May 2001 (22.05.2001), the whole document.	1-23
A	US 5,890,005 A (LINDHOLM) 30 March 1999 (30.03.1999), the whole document.	1-23
A	US 6,266,776 B1 (SAKAI) 24 July 2001 (24.07.2001), the whole document.	1-23
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family		
Date of the actual completion of the international search 02 February 2004 (02.02.2004)		Date of mailing of the international search report 25 FEB 2004
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703)305-3230		Authorized officer MENG-AI AN <i>Peggy Harrod</i> Telephone No. (703) 305-3665